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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,202	01/17/2001	Adrian Yap	PD-200294	5500

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Hughes Electronics Corporation
Patent Docket Administration
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EXAMINER

BOCCIO, VINCENT F

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,202

Applicant(s)

YAP ET AL.

Examiner

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2-3, 5, 12-15, 20, 21-22, 25, 27, 30, 33-34, 37, 40, 42, 44, 47 are rejected under 35 U.S.C. 102 (b) as being anticipated by Chauval et al. (EP 0 840 512 A2).

Regarding claim 1, Chauval discloses and meets the limitations associated with

O a multi-processor ({57}, first page, abstract, CPU ... processing ... data packet stream ... OSD coprocessor"), digital STB (PAGE 4, "SET-TOP BOXES"),
comprising:

- a first processor **performing essentially** all real time functions (page 12, line 21, "real time video decoding");
- a second processor **performing essentially** all non-real time functions (other less labor intensive processing), met by having a processor and co-processor (real time processor processing video and non-real time processor handling other less labor intensive tasks), therefore multiple processors substantially handling real and non real time processing tasks.

Regarding claims 2-3, Chauval discloses and meets the limitations of wherein the STB further comprises:

- a memory connected/coupled to a bus for temp storage of received audiovisual packets (page 12, line 46 etc., "video decoder received a video bit-stream from SDRAM", page 14, "audio stored in SDRAM"), of a broadcast

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(since a set top box and further page 5, recites "A digital satellite System", therefore receiving a broadcast, also reference Fig. 2, "FRONT END") wherein the first and second processors are connected to the bus (Fig. 1, buses 320 & 330 and other etc.....);

- a recording/mass storage device for recording and reproducing A/V data packets and for transmitting the recorded to the memory or SDRAM (page 12, "recorder", met by recording thru 1394 and reproducing thru 1394, back to circuitry, as shown in Fig. 1) and
- a decoder (Fig.1, "A/V core", MPEG video and audio decoding) for decoding the A/V packets for display (col. 133, MPEG compression/decompression).

Regarding claim 5, Chauval further meets the limitation of wherein the first processor can also read on the transport processor 210 of the integrated multi-processor circuit as shown in Fig.1, by receiving a DSS transport data.

Regarding claim 12, Chauval meets the limitation of wherein the STB is embodied as a DVR (met by having recording and reproduction capability, by a digital recording and playback device).

Claims 13, 14, 15, 20-22, 25-26, 27, 30, 32-34, 37, 40, 42, 44, 47 are analyzed and discussed with respect to the claims above, wherein the claims recite additional limitations such as:

O apparatus and method embodied associated with a DVR, since Chauval provides for digital recording;

O the source being a digital satellite system (page 5), wherein the input according to Fig. 1, is DSS transport data or from a Digital Satellite Front End, wherein providing digitally encoded data to the STB, wherein the data is provided from a satellite, meets the limitation of having a carrier frequency, thereby demodulation is accomplished for the STB to record and handle the selected carrier, all limitations as recited are met by the prior art applied.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4, 6-11, 16-19, 23-24, 28-29, 31-32, 35-36, 38-39, 41, 43, 45-46, 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chauval et al. (EP 0 840 512 A2).

Regarding claims 4 and 16, Chauval fails to particularly disclose the type of recording device being one of HD, magnetic or optical types.

The examiner takes official notice that hard drives, optical as well as magnetic recording devices are well known and obvious to utilize, therefore, it would have been obvious to one skilled in the art at the time of the invention to utilize a magnetic, optical or even hard drive as a mass storage device as is well known and obvious to those skilled in the art.

Regarding claim 8, Chauval discloses wherein the first processor controlling packets inputted from the DSS transport data port, conditional access (Fig.1, "de-scrambling", page 12), but, to particularly disclose controlling program guide data input to the STB, handled by the first processor.

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The examiner takes that providing EPG data in a stream to a set top box is well known, therefore, it would have been obvious to let the first processor control and handle the EPG data received thru the transport stream processor, as is considered obvious to one skilled in the art.

Regarding claim 9, Chauval as applied provides for the second processor to control the OSD functions, but, fails to disclose controlling GUI/browser functions to enable a user to send command data to the STB and to manipulate data on a screen of a display that is operatively connected to the STB.

The examiner considers the display output and the utilization of a display met, associated with a STB and further it is well known to provide GUI and browser functions and to allow a user to send command data to the set top box to manipulate data on a screen and control (associated with the video playback control commands page 13, Table 10 etc.....),

therefore, it would have been obvious to one skilled in the art at the time of the invention to allow the second processor handle other functions, such as GUI and user manipulating data on the screen {in view of the second handling OSD functions}, while the real time processor handling real time functions, as is considered obvious to those skilled in the art.

Regarding claims 10-11 and 18-19, Chauval discloses the second processor handling OSD, but fails specifically disclose user commands handled by the non-real time processor and wherein the user commands are transmitted to the second via a remote control device.

The examiner takes official notice that providing OSD data to a screen, can include user initiated and user manipulate-able OSD information and further that remote controls are well known to be associated with STBs, therefore, it would have been obvious to accept commands (from a remote control) to the non-real time processor in view of low labor intensive task, improve ease of operation and interaction, as is well known to those skilled in the art.

Claims 23-24, 28-29, 31-32, 35-36, 38-39, 41, 43, 45-46, 48-49 are analyzed and discussed with respect to the claims above.

Regarding claims 6-7 and 17 have been analyzed and discussed with respect to the claims above, to handle GUI and Browser with the Host, being obvious, wherein the second can be

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referred to as a host or hosts processing elements connected to the bus,

- further as recited meets the limitation of wherein the host processor or processor handles a function or functions, is met by host processors (Fig.1, Traffic Controller and Co-communication co-processors),

The second processor/processes meets the limitation of host processor/processes (Fig. 1, met by Co-processors and Traffic Controller), which are connected to the bus/buses,

- the STB further comprising: an interface for receiving the audiovisual data packets from the transport processor (Fig. 1, "Transport packet processor 210") and for transferring the received audiovisual data packets, to the memory (SDRAM or recording thru 1394), to store temporarily (SDRAM, associated with Traffic Controller 310) to decoders 250, wherein the host (met by the Traffic Controller), directs the memory to transfer to and from the memory {even record medium, thru 1394}, to the decoder.

Further, upon reproduction host (Traffic Controller), directs the stored video from the storage device, thru 1394, bus, to buses to DRAM and simultaneously to the decoding section 250.

Further, since a STB, viewing is considered to be part of operation, wherein a video and audio are received by the transport processor, transferred by a host (Traffic Controller), to memory (SDRAM), to decoding section 250, simultaneously.

In addition, to receive recorded data thru 1394, to bus, to SDRAM, to decoding section, controlled by a host Traffic controller, simultaneously.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communication intended for entry)

or:

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(703) 308-5359, (for informal or draft communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Thursday, 8:00 AM to 5:00 PM Vincent F. Boccio (703) 306-3022.

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service (703) 306-0377.

Primary Examiner, Boccio, Vincent
8/9/04


VINCENT BOCCIO
PRIMARY EXAMINER